Utah Digital Health Services Commission
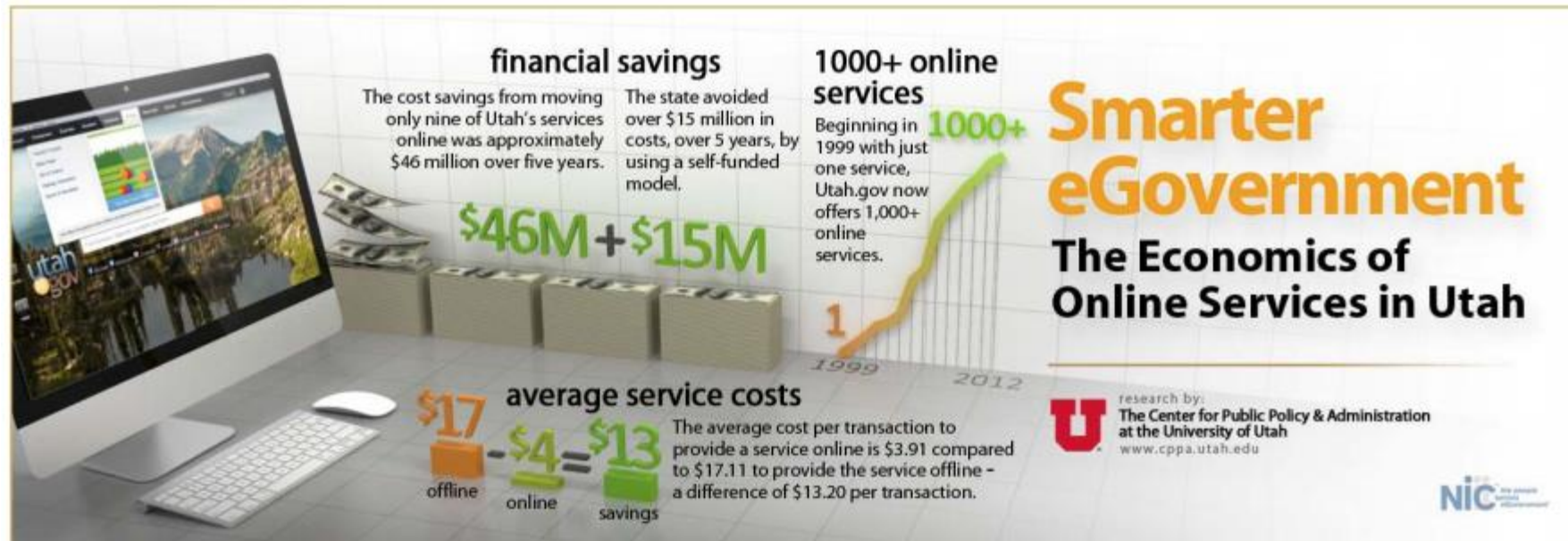
July 2019

Agenda

- ✓ Setting the Digital Government agenda for 2019-20.

- ✓ Review of 2018 metrics and accomplishments.

- ✓ Preparing for the 2020 Digital State Survey.

- ✓ Status of Utah Business Portal

- ✓ Requirements of SB137: Single Sign-On Citizen Portal

- ✓ UtahID

- ✓ Overview of the Utah Digital Government Technology Platform

- ✓ Coordination with Utah Department of Health

- ✓ Scenario Planning for the Future of Digital Government

2018 Digital Government Online Transactions

21,124,039 Non-Financial Transactions   16,830,925 Financial Transactions

37,954,964 Total Transactions

financial savings

The cost savings from moving only nine of Utah's services online was approximately $46 million over five years.

The state avoided over $15 million in costs, over 5 years, by using a self-funded model.

$46M + $15M

1000+ online services

Beginning in 1999 with just one service, Utah.gov now offers 1,000+ online services.

1000+

1999   *2012*

Smarter eGovernment

The Economics of Online Services in Utah

average service costs

The average cost per transaction to provide a service online is $3.91 compared to $17.11 to provide the service offline – a difference of $13.20 per transaction.

$17 offline − **$4** online = **$13** savings

research by:
The Center for Public Policy & Administration
at the University of Utah
www.cppa.utah.edu

connecting Utahns with **digital government**

A survey of 611 Utah residents

Center for **PUBLIC POLICY & ADMINISTRATION**
THE UNIVERSITY OF UTAH
www.cppa.utah.edu

widely used

3 out of 4 Utahns have used **utah.gov** in the past year

satisfied

80% are satisfied with the **utah.gov** website

utah gov

reliable

81% say services on **utah.gov** work when needed and expected

saves time

85% say **utah.gov** saves time compared to offline methods

less hassle 👍

82% say using **utah.gov** is less hassle when needing to interact with government

valuable

87% say that the digital services that **utah.gov** provides are valuable

Center For Public Policy & Administration
THE UNIVERSITY OF UTAH

Best States for Government Digitalization

Government Digitalization Rank ▲	State		Government Digitalization
#1	🏛️ Utah		1

- Adaptive Leadership
- ICT
- Security
- Citizen Engagement
- Service Delivery

- Finance & Administration
- Health & Human Services
- Transportation
- Public Safety
- Performance Metrics

Digital State Survey 2018

▶ "But even among the best, there were those who stretched ahead even further to demonstrate to rest of the nation what best practices look like. Programs that particularly impressed judges were Missouri's public safety initiatives; Virginia's health and human services projects; and Utah's leading-edge efforts spanning transportation, citizen engagement, transparency, mobile government and social media."
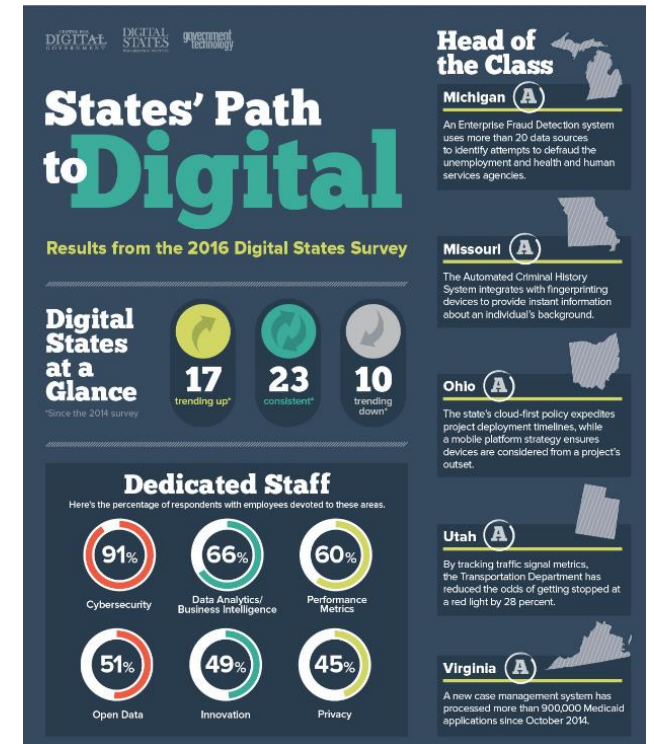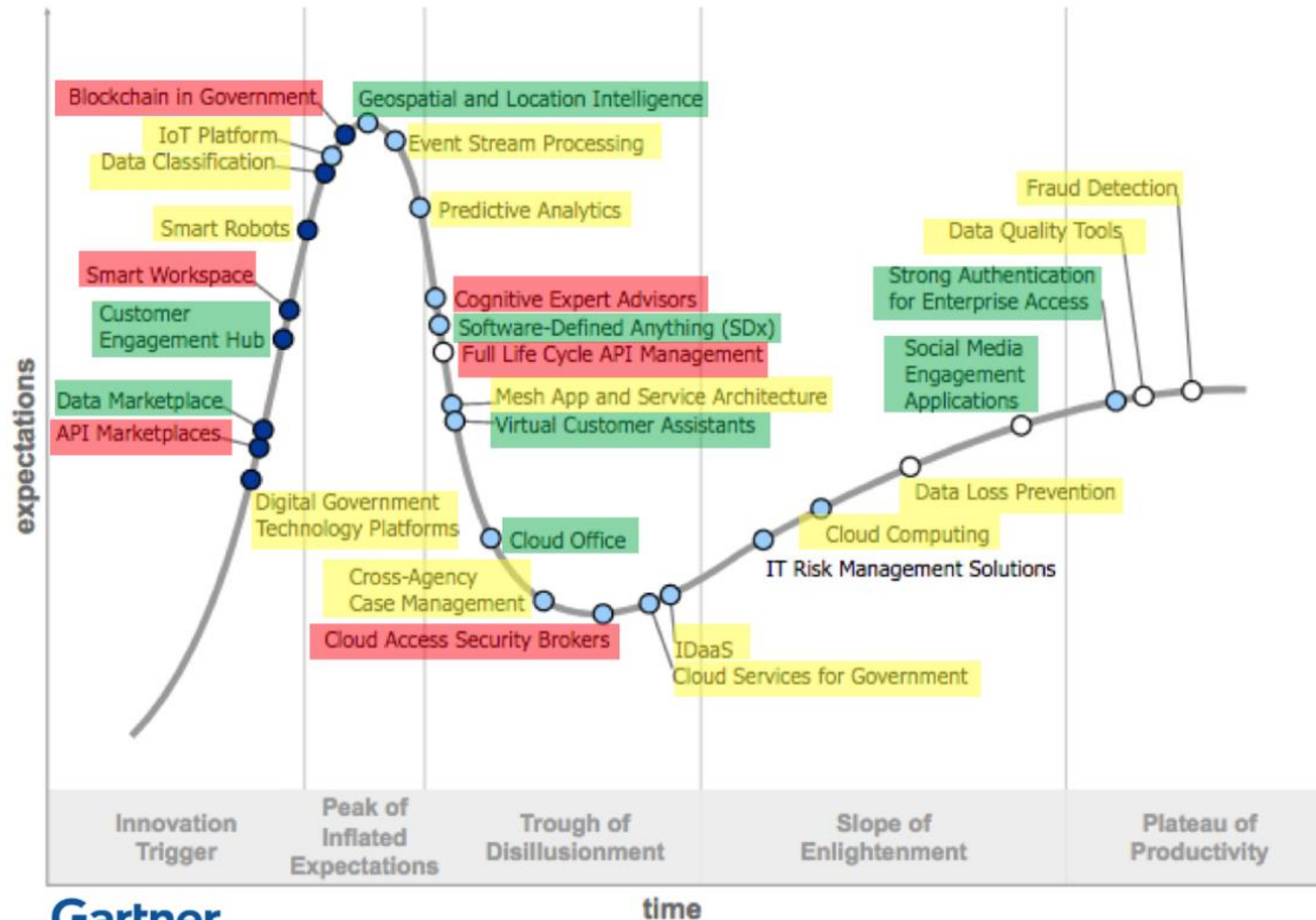
Best States Survey: Utah Standing

- Healthcare - #15
- Corrections - #37
- Public Safety - #25
- Economy - #4
- Economic Opportunity - #5
- Transportation - #2
- Fiscal Stability - #9
- Education - #9

Digital Government Experience Council

- Improving User Experience

- Business Portal Coordination

- Using Artificial Intelligence to Improve Citizen Outreach

- Ensuring Statewide Accessibility

- Internet of Things Strategic Coordination

- Improving Statewide SEO

- Annual Reporting

- Improving the Adoption of Online Services

- Innovation

- Delivering Services through Chatbots and Digital Assistants

- Social Media Coordination

- Sharing Ideas for Digital Services

- Improving the use of Metrics in Utah Digital Government

- API Coordination

- Open Data Excellence

- Using Cloud Services to Accelerate Delivery of Digital Government

- Government-to-Government Coordination with Counties, Cities, and Education

- Web Standards

- Improving the Digital Government Platform Architecture

- Master Data Index Coordination

- Utah.gov Coordination

- Mobile Development

Digital Government Hype Cycle for 2018

Blockchain in Government
IoT Platform
Data Classification
Smart Robots
Smart Workspace
Customer Engagement Hub
Data Marketplace
API Marketplaces
Digital Government Technology Platforms

Geospatial and Location Intelligence
Event Stream Processing
Predictive Analytics
Cognitive Expert Advisors
Software-Defined Anything (SDx)
Full Life Cycle API Management
Mesh App and Service Architecture
Virtual Customer Assistants
Cloud Office
Cross-Agency Case Management
Cloud Access Security Brokers
IDaaS
Cloud Services for Government

Fraud Detection
Data Quality Tools
Strong Authentication for Enterprise Access
Social Media Engagement Applications
Data Loss Prevention
Cloud Computing
IT Risk Management Solutions

expectations

Innovation Trigger | Peak of Inflated Expectations | Trough of Disillusionment | Slope of Enlightenment | Plateau of Productivity

time

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Utah Department of Technology Services

Senate Bill 137

UtahID

Single Sign-On Business Portal
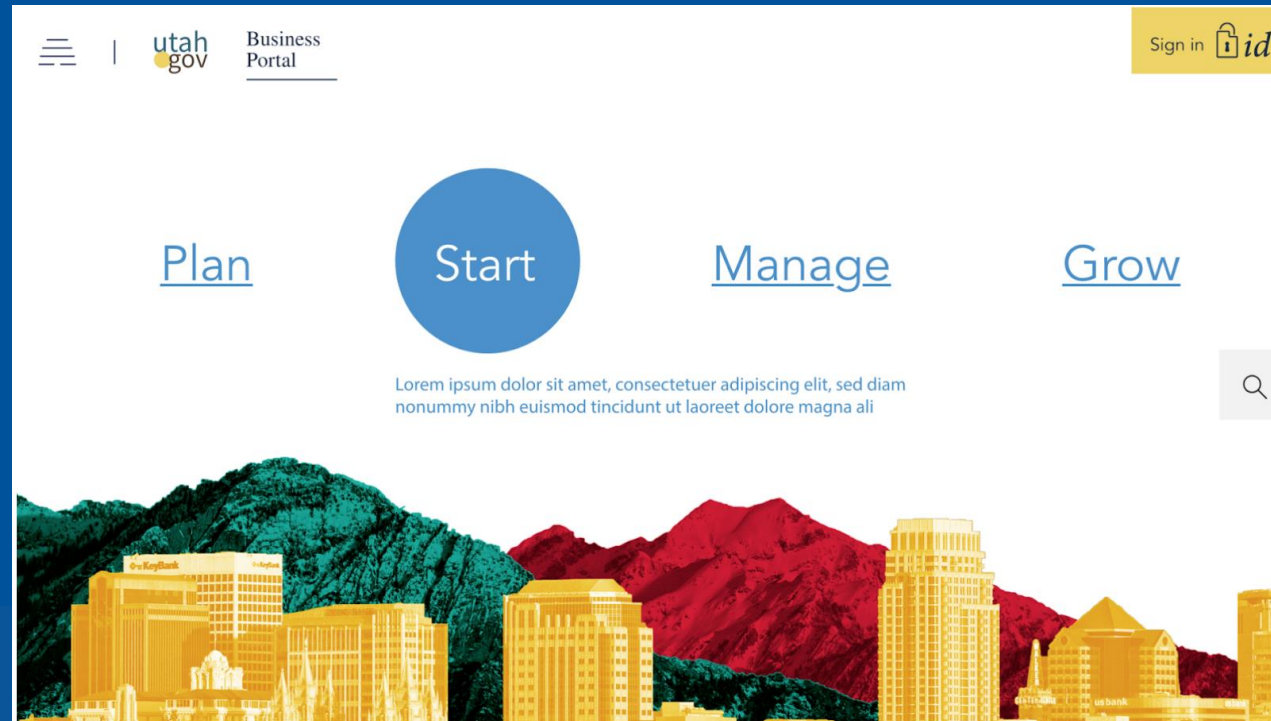
Next Generation Citizen Portal
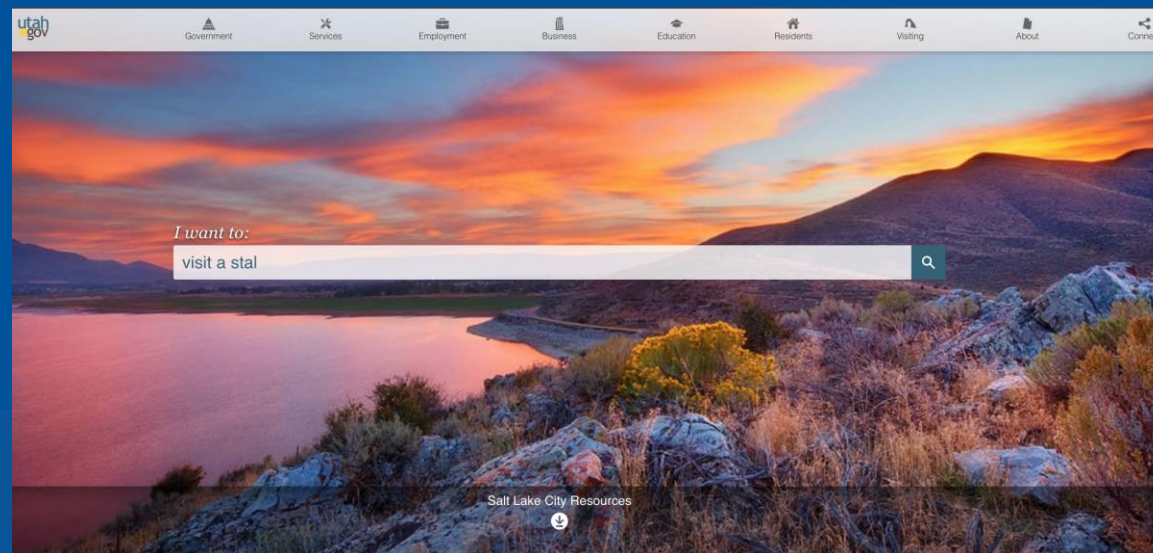
Five Platforms Comprise the Utah DGTP

Citizen Experience Platform	It provides interfaces and technologies, as well as implements the policies and procedures for citizen and business engagement. It also measures the experience of these users.
Ecosystems Platform	It provides digital interfaces and implements the related policies and procedures for governments and ecosystem partners to exchange data and services.
IT Systems Platform	This is the heart of what government IT does today. It provides the technologies, policies and procedures for back-office systems.
Internet of Things (IoT) Platform	It provides the interfaces, data governance and context, as well as implements the policies and procedures for collecting and processing data from IoT sensors.
Data and Analytics Platform	It provides advanced analytics, geospatial and location analytics, and artificial intelligence capabilities for the processing data collected or stored in any area of the platform. This is the core of the DGTP.

https://dts.utah.gov/standards/digital-transformation/digital-government/utah-digital-government-technology-platform
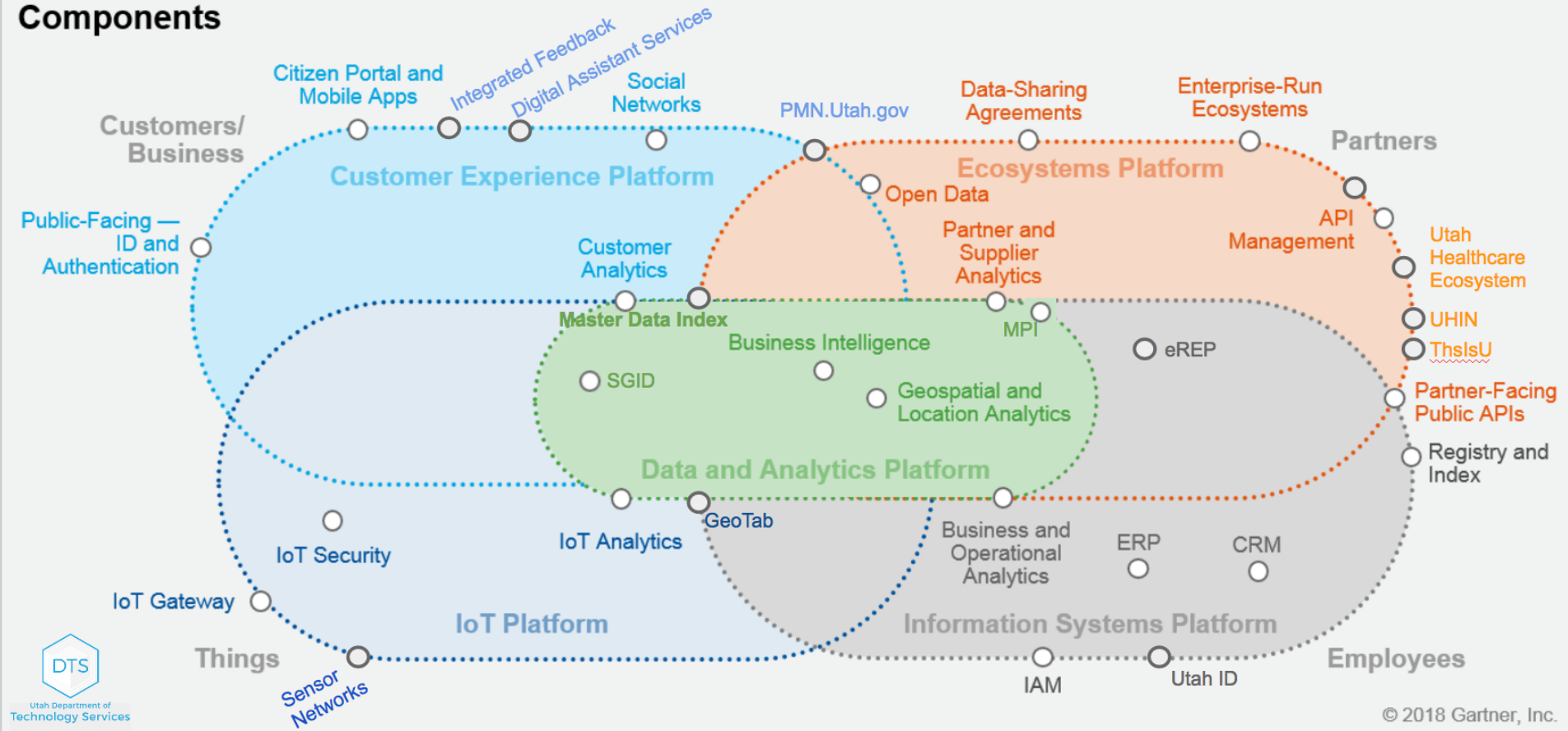
6 ways AI can improve how government works right now

✓ **Overcome resource constraint:** AI is much faster and more accurate at sifting through large volumes of information. The Georgia Government Transparency and Campaign Finance Commission uses handwriting analysis software to speed the processing of 40,000 pages of disclosures it receives every month.

✓ **Reduce paperwork:** The federal government spends a half-billion hours every year on documenting and recording information. Robotics and cognitive automation could perform data entry and paperwork processing in any number of areas -- for child welfare workers, for example, leaving them more time for interaction with children and their families.

✓ **Cut backlogs:** The U.S. Patent and Trademark Office's backlog of patent applications hinders innovation, but cognitive technologies can sift through large data backlogs and perform simple, repetitive actions, leaving difficult cases to human experts. Robotic process automation can automate workflow, in some cases with little human

✓ **Enable smart cities:** When combined with internet-of-things infrastructure, AI can monitor the surrounding environment to dim street lighting, monitor pedestrian traffic and adjust traffic lights to ease rush hours.

✓ **Predict outcomes:** Machine learning and natural-language processing can spot patterns and suggest responses. Measuring soldiers' vital signs with wearable physiological monitors lets the Army predict the seriousness of wounds and prioritize treatment, for example. The Southern Nevada Health District, meanwhile, uses AI to analyze Twitter posts to find restaurants where people reported food poisoning so it can direct investigations to those locations.

✓ **Answer questions:** Automation can offload work from call centers that answer many of the same questions multiple times a day. The Army's SGT STAR virtual assistant, for example, helps recruits understand their different enlistment options, performing the work of 55 recruiters with a 94 percent accuracy rate.

New Standards Approved in Architecture Review Board

▶ **Voice Enabled Services**

▶ **IoT Platform**

▶ **Cloud Services**

▶ **Rapid Application Development Environment**

▶ **Cloud Suitability Framework**

A few Questions to Answer

1. What areas of citizen service are being disrupted by digital forces or other political, consumer or socioeconomic trends?

2. Where is the greatest need to reverse the rising costs of delivering services?

3. What services no longer make sense or provide value? What new services need to replace these?

4. Where are citizens or elected officials most passionate about criticizing current capabilities?

5. How can citizens be served better and differently by new digital technologies?

Gartner's Digital Government Maturity Model

Maturity Level	E-Government 01 Initial	Open 02 Developing	Data-Centric 03 Defined	Fully Digital 04 Managed	Smart 05 Optimizing
Value Focus	Compliance	Transparency	Constituent Value	Insight-Driven Transformation	Sustainability
Service Model	Reactive	Intermediated	Proactive	Embedded	Predictive
Platform	IT-Centric	Customer-Centric	Data-Centric	Thing-Centric	Ecosystem-Centric
Ecosystem	Government-Centric	Service Co-creation	Aware	Engaged	Evolving
Leadership	Technology	Data	Business	Information	Innovation
Technology Focus	SOA	API Management	Open Any Data	Modularity	Intelligence
Key Metrics	% Services Online	No. of Open Datasets	% Improvement in Outcomes, KPIs	% New and Retired Services	No. of New Service Delivery Models

The Future of Government?

Change happens faster than you can plan for it

What Are Ecosystems?

Natural ecosystems are "the complex of a community of organisms and its environment functioning as an ecological unit"
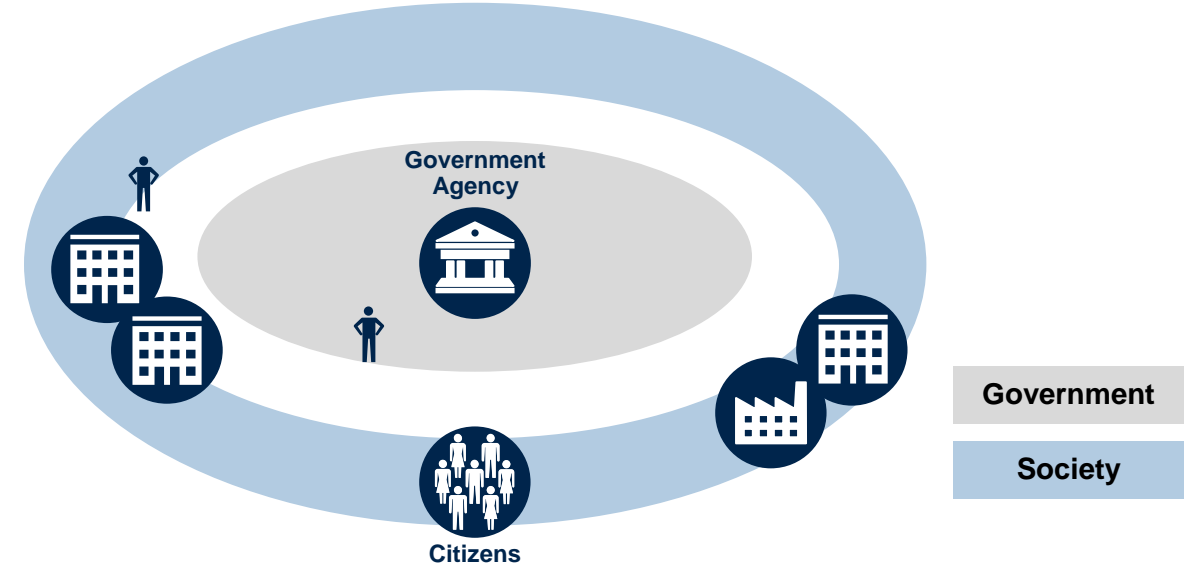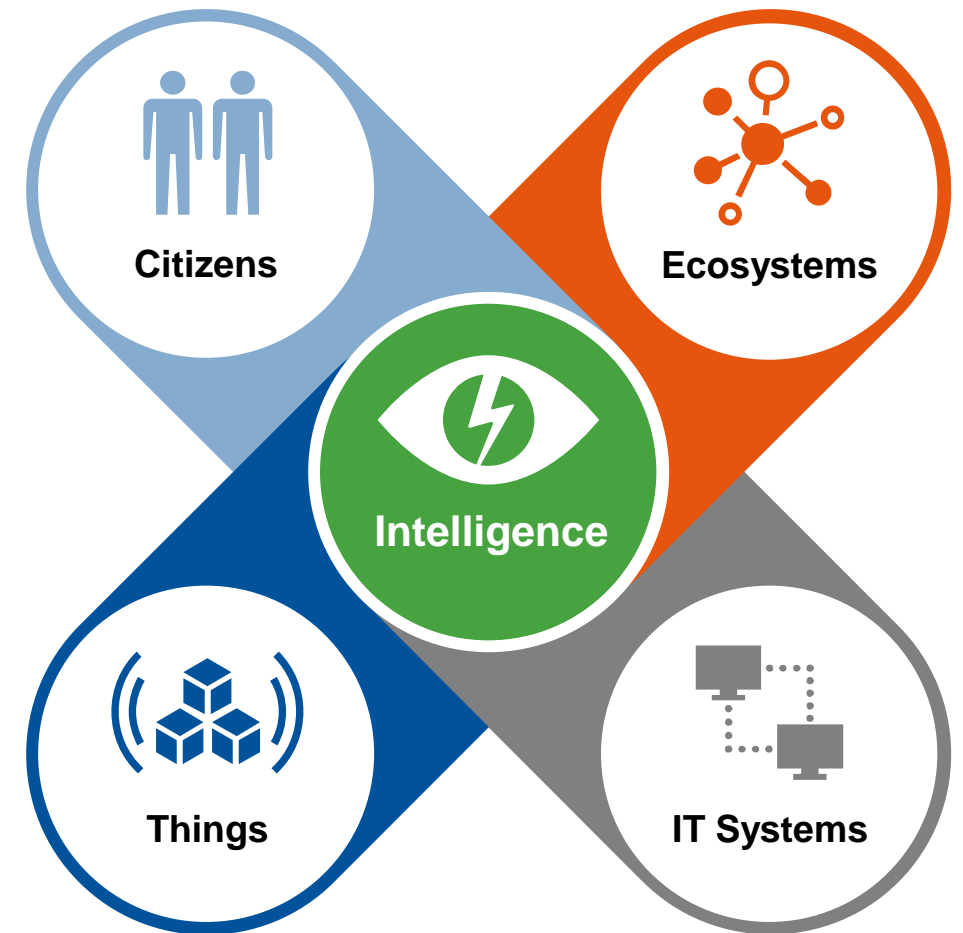

Digital business ecosystem includes every entity that the government interacts with:

- Citizens and individuals
- Businesses and organizations
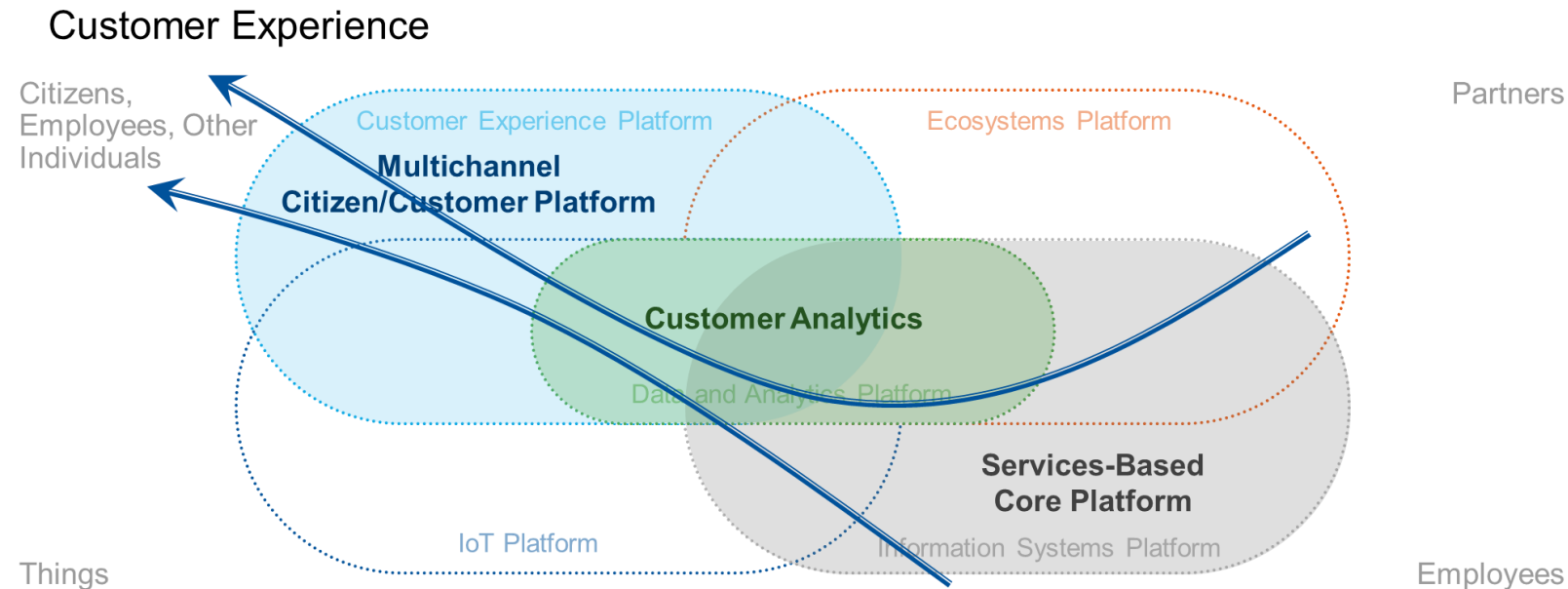- Other governments and government agencies
- And their things and your things

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What Are Digital Technology Platforms?

In the digital world, technology platforms …

- Are collections of services and capabilities

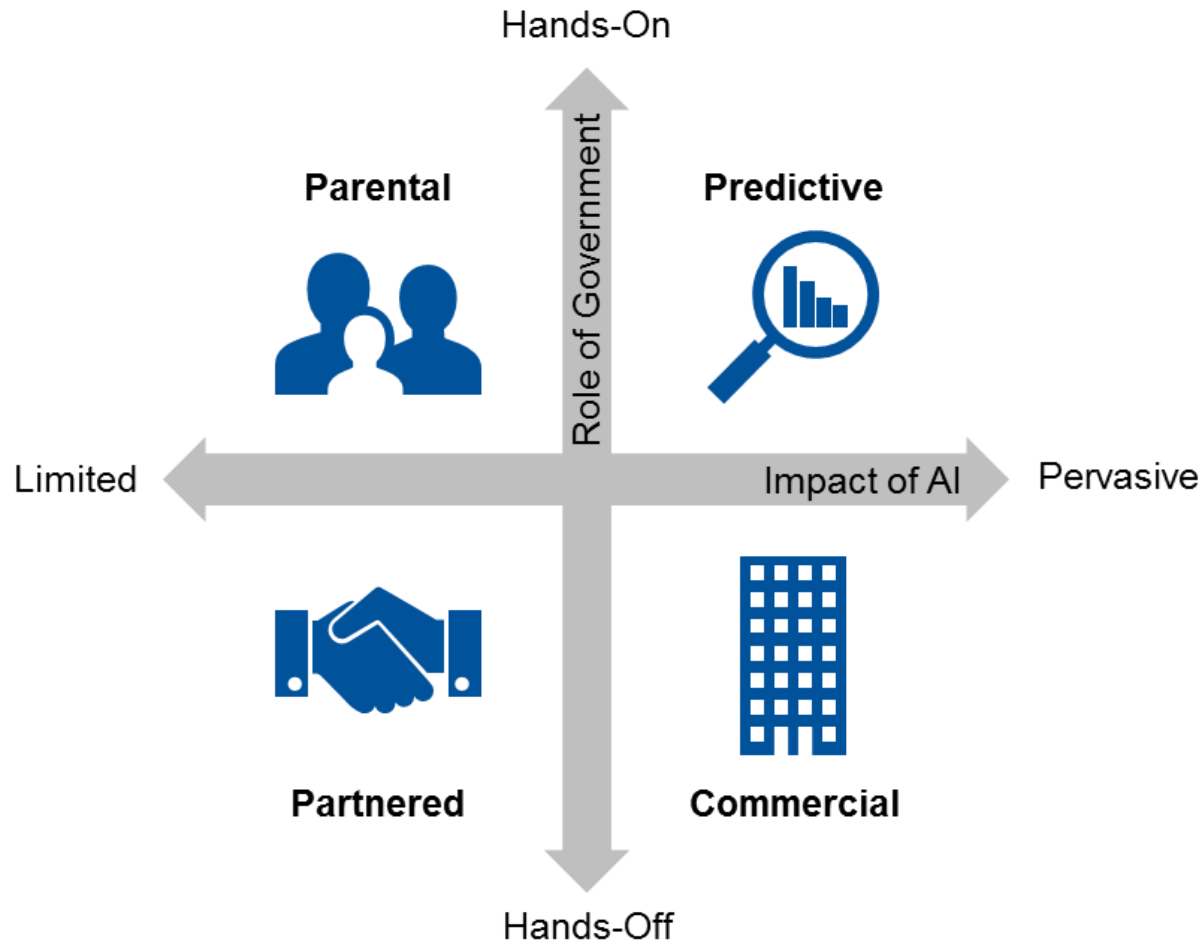- Enable digital services across the organization and the ecosystem

Citizens

Ecosystems

Intelligence

Things

IT Systems

Gartner.

Why Do Digital Government Technology Platforms Matter?

Customer Experience

Citizens, Employees, Other Individuals

Partners

Customer Experience Platform

Ecosystems Platform

Multichannel Citizen/Customer Platform

Customer Analytics

Data and Analytics Platform

Services-Based Core Platform

IoT Platform

Information Systems Platform

Things

Employees

- Facilitate innovation and institutional agility
- Provide flexibility for changing policies

Gartner for IT Leaders Tool

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Gartner.

Why Ask, "How Will Government Deliver Services in 2030?"

Scenario planning:

- Explore alternatives for the future … which are driven by uncertain, independent forces

- Focus on what is common across scenarios … not on what is likely to happen
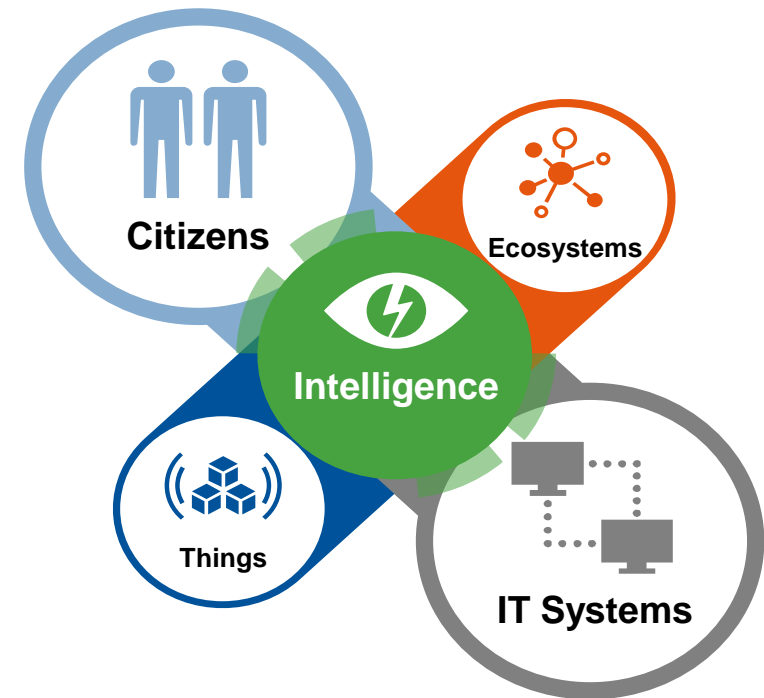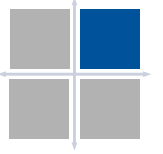
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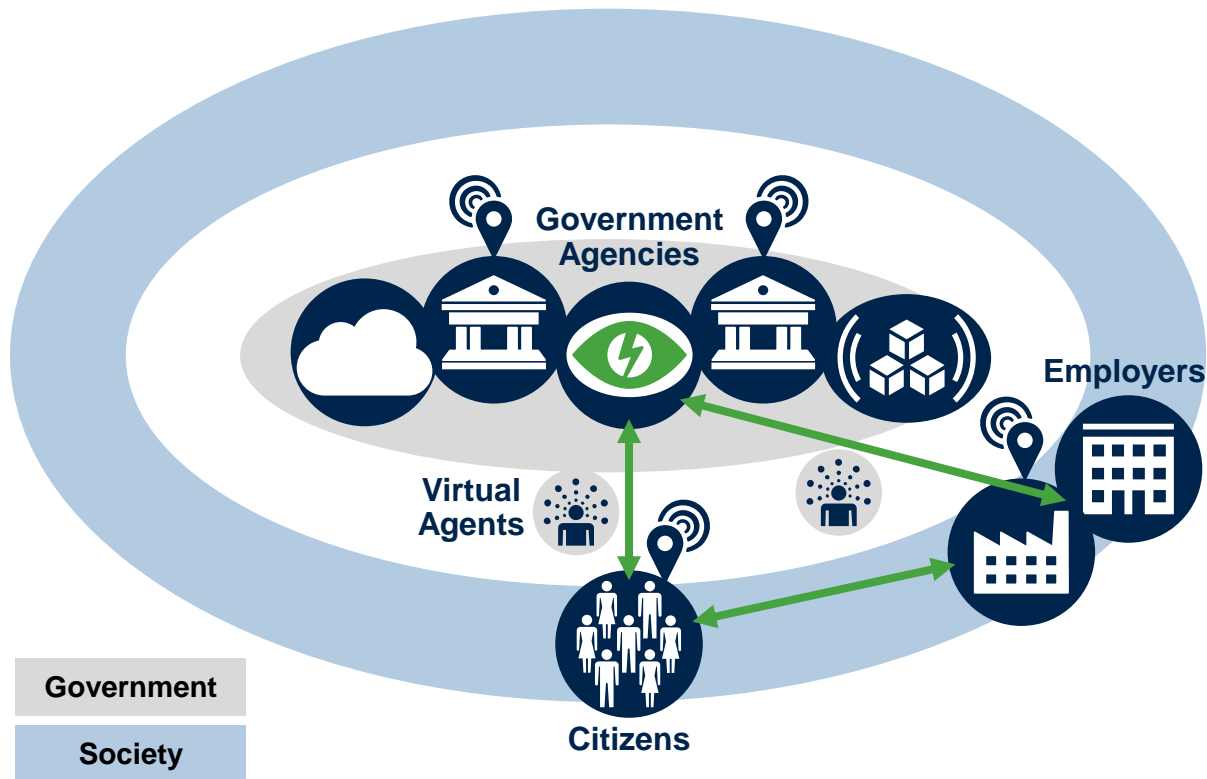
Parental: Human-Centric Service Delivery
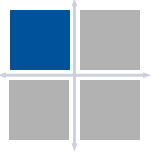
Parental Ecosystem
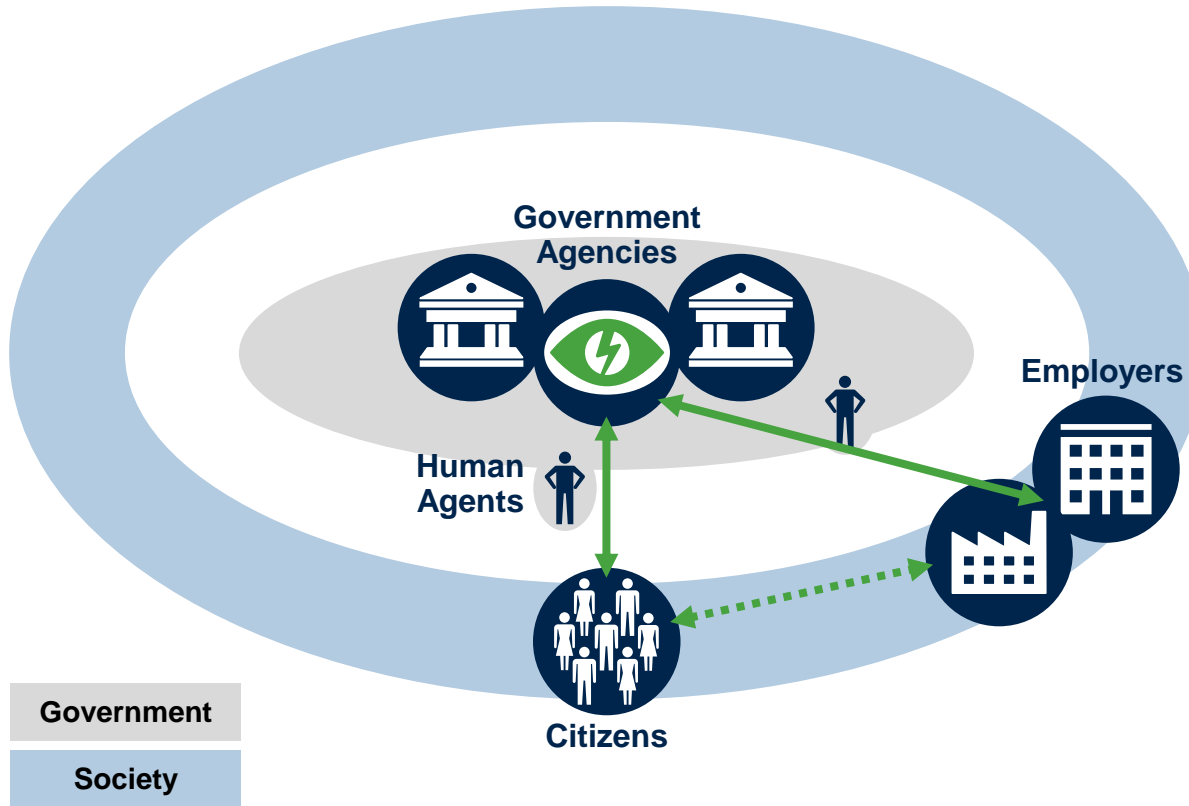
- Multiple government channels
- Back-office systems support front-office workers
- In-house analytics aid human judgment

Gartner for IT Leaders Tool

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Predictive: Government Platforms Integrate and Utilize Ecosystem Data

Predictive Ecosystem

Government Agencies

Virtual Agents

Employers

Citizens

Government

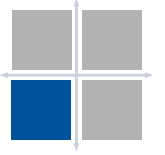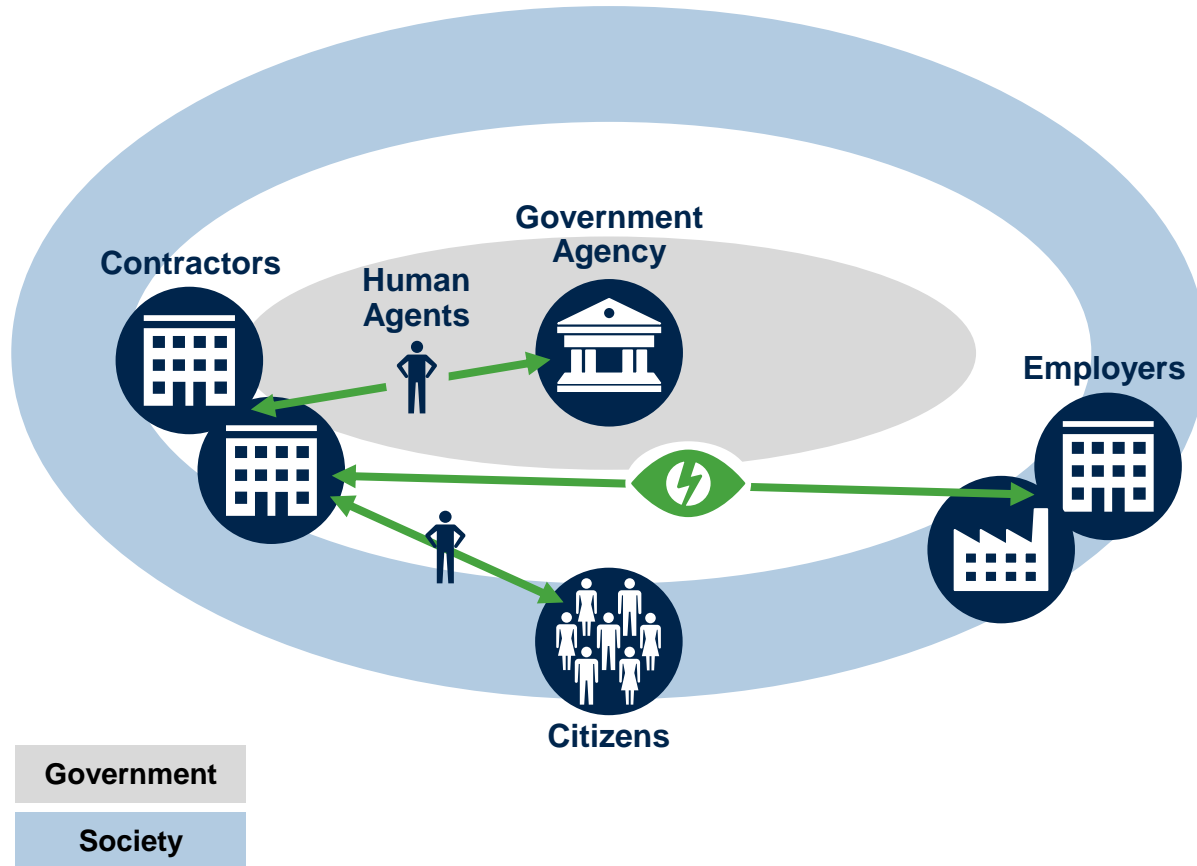Society

- Data is ingested from government-operated IoT devices
- Chatbots and AI manage routine citizen interactions
- Public policy gets smarter over time

Citizens

Ecosystems
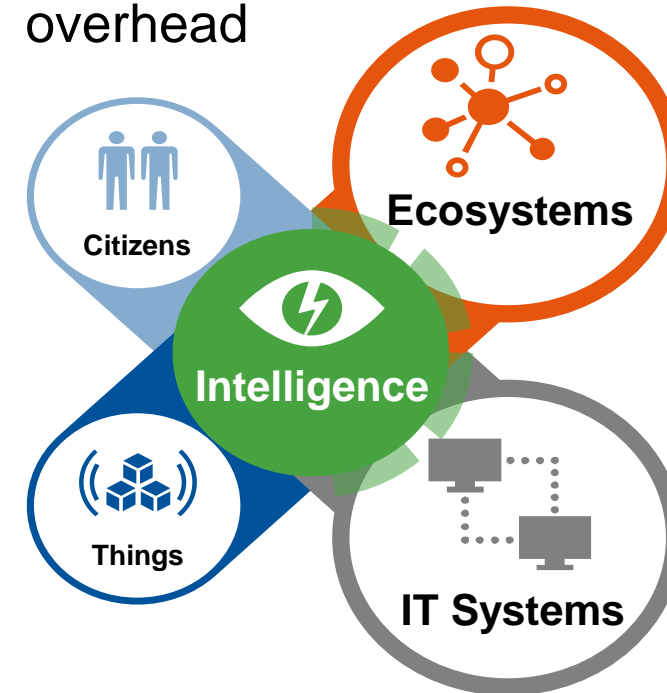
Intelligence

Things

IT Systems
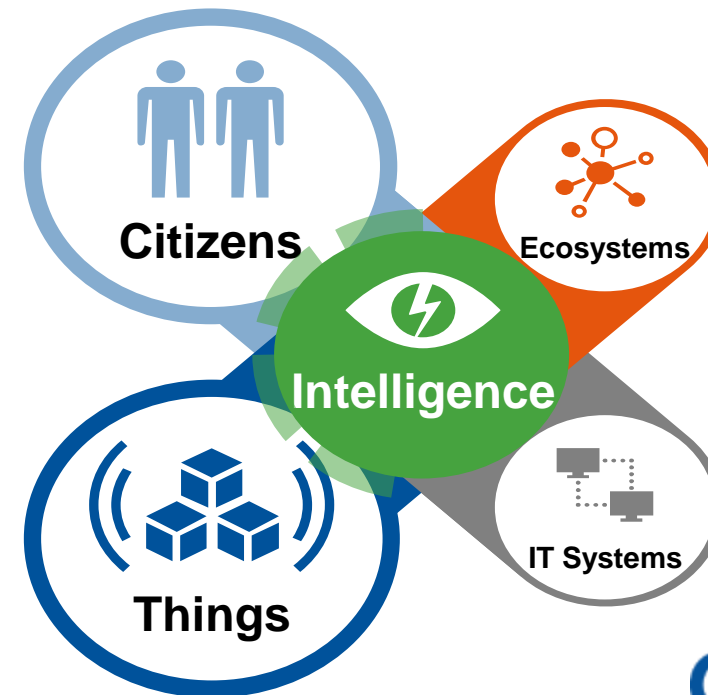
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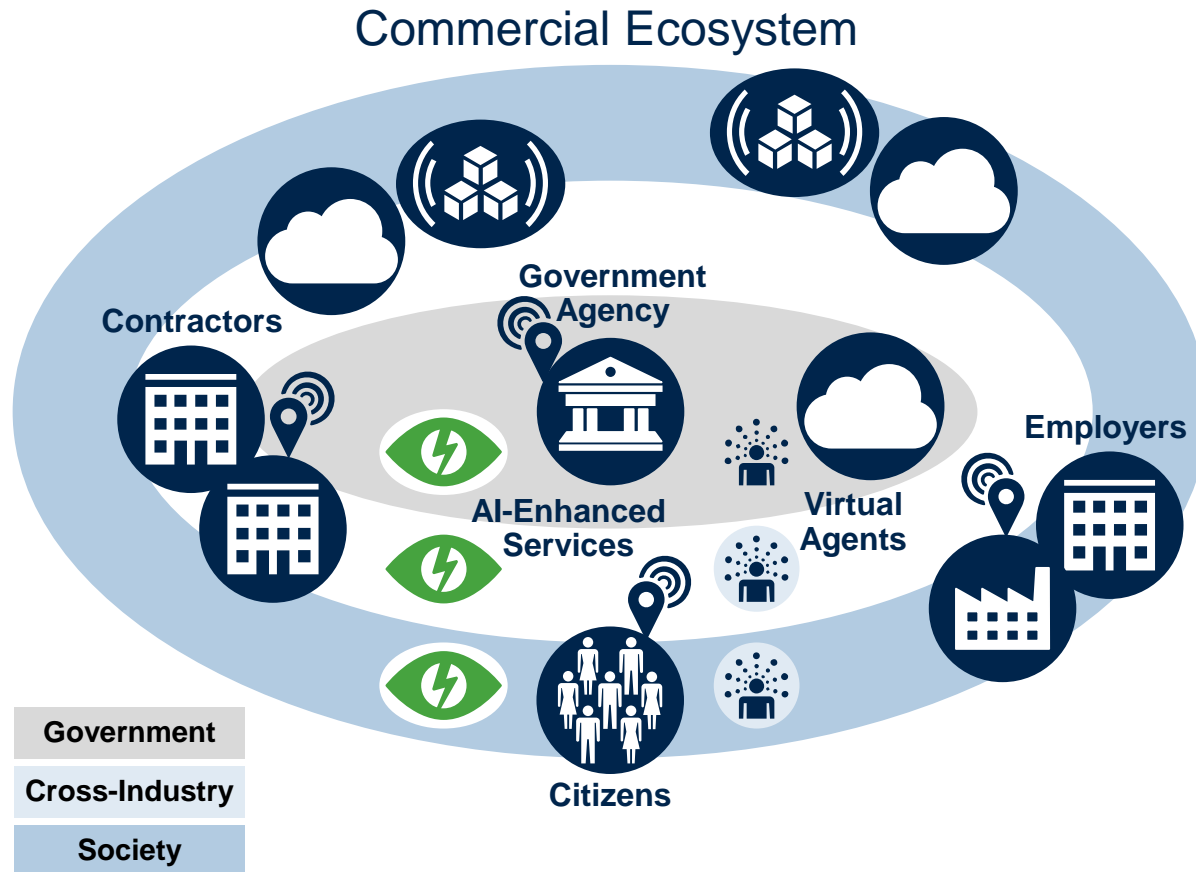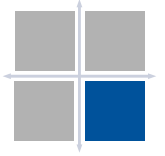# Partnered: Contractor-Mediated Service Delivery

Partnered Ecosystem

- Government influences ecosystem evolution — but does not control it
- Innovation results from competition and diversity
- Regulation and security add costly overhead

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Commercial: A Dynamic and Diverse Ecosystem

Commercial Ecosystem

Contractors

Government Agency

AI-Enhanced Services

Virtual Agents

Employers

Citizens

Government
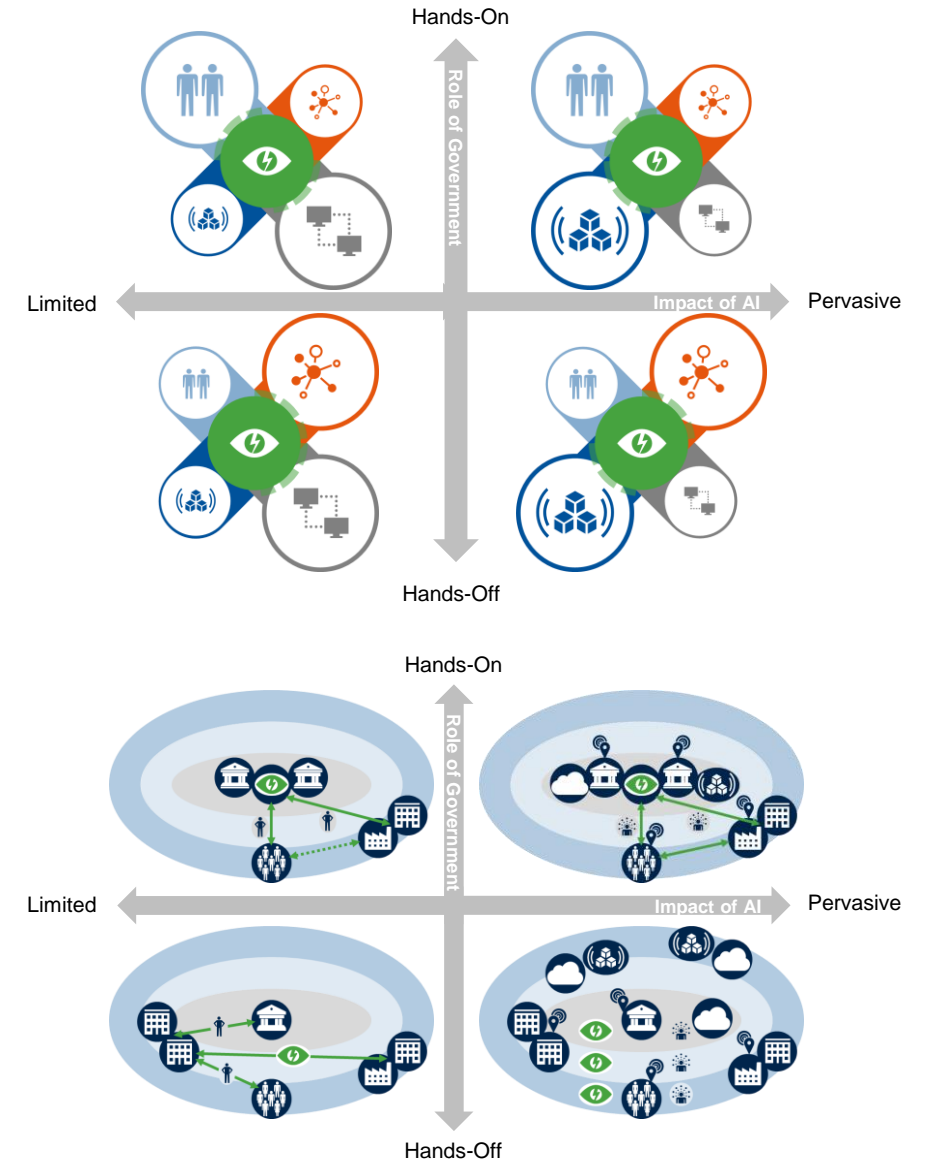
Cross-Industry

Society

- Platform ownership is distributed
- AI and the IoT enable real-time service orchestration
- Data marketplaces ensure data reuse
- Innovation keeps pace with the private sector

Citizens

Ecosystems

Intelligence

Things

IT Systems

**Gartner.**
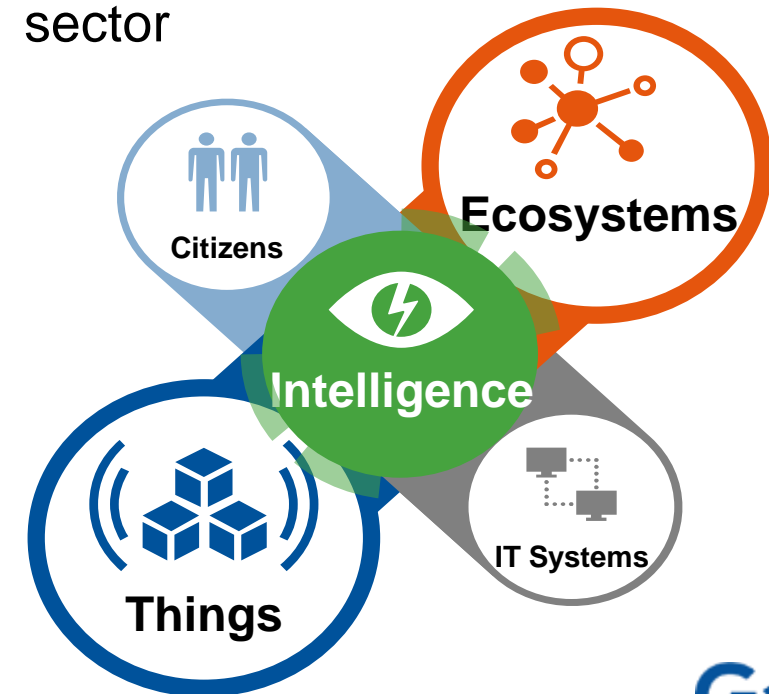
Comparing the Implications of Scenarios

Each future scenario involves:

- Fusion of business and IT

- Modular, flexible, service-based solutions

- Dependence on emerging technology capabilities

- Exchange and analysis of data

- Intelligent services and cybersecurity

Gartner for IT Leaders Tool

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Digital Government Technology Platforms in 2030

- The intelligence platform will be the primary differentiator

- User experience and connectivity will engage citizens and businesses

- Open-standards-based platforms will enable agility and responsiveness

Citizens

Ecosystems

Intelligence

Things

IT Systems

Gartner.
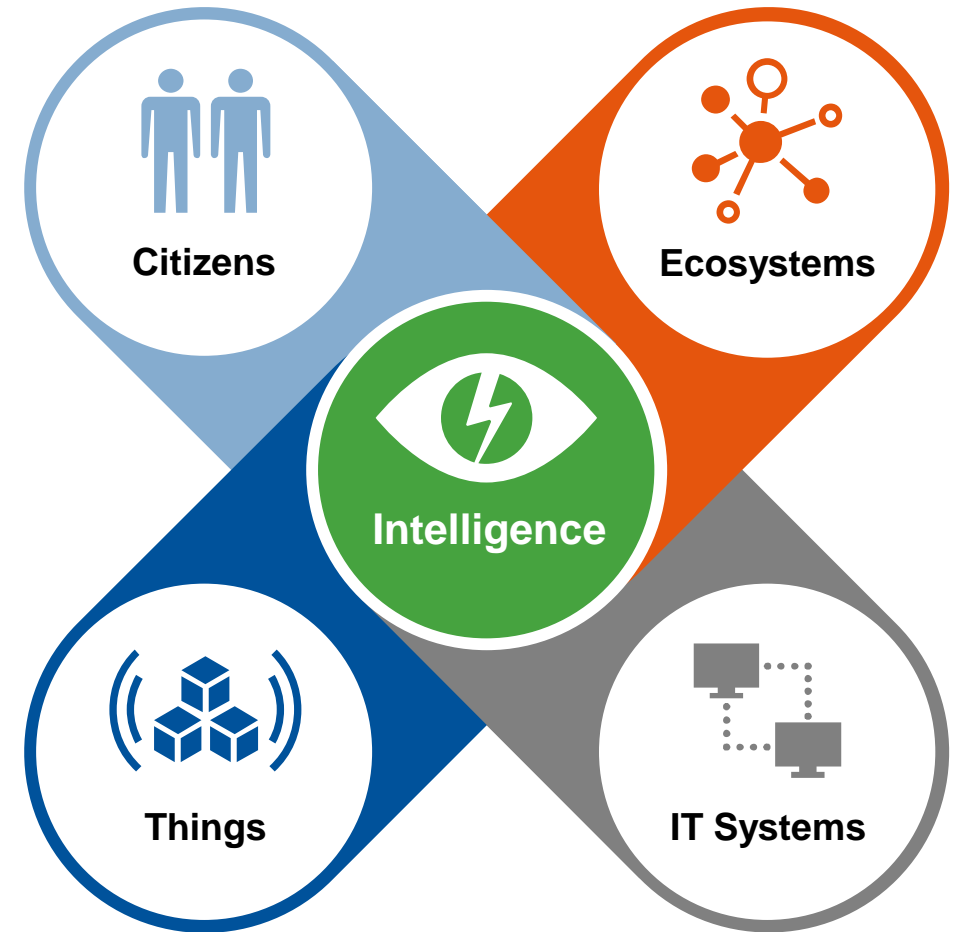
Digital Ecosystems in 2030

- Platforms will underpin all ecosystems

- Ecosystems adapt and will evolve over time

- Strategic investments will determine effectiveness

- Data and analytics will be valued above all else